Applicant: Thomas W. Melcher

RESPONSE TO OFFICE ACTION MAILED APRIL 1, 2010

Amendment to the claims:

1-25 (Cancelled)

26. (Currently amended) [[The]] \underline{A} vehicle suspension, of claim 25, comprising:

a lower arm having an inboard end and an outboard end;
an upper control arm having an inboard end and an outboard
end, the upper control arm pivotally connected to the lower arm;
an actuator comprising an actuation mechanism and at least
one actuator arm;

the actuator arm pivotally connected to the upper control
arm;

the actuator is motively connected to the upper control arm
by the actuator arm;

a cammed cylinder in fluid communication with the actuation mechanism that at least partially controls the actuator arm; and the actuation mechanism connected to the actuator arm, wherein the actuation mechanism includes comprises a mechanical shock absorber and an actuator line connects the cammed cylinder to the mechanical shock absorber.

- 27. (Currently amended) The vehicle suspension of claim <u>26</u> [[24]], further comprising [[a]] <u>the</u> mechanical shock absorber pivotally connected to the actuator arm.
- 28. (Currently amended) The vehicle suspension of claim 27, further comprising:

a cam member supported on the lower arm;

Applicant: Thomas W. Melcher

RESPONSE TO OFFICE ACTION MAILED APRIL 1, 2010

 $\underline{\text{the}}$ [[a]] cammed cylinder having a piston motively coupled to the cam member; and

 $\underline{\text{the}}$ [[an]] actuator line connecting the cammed cylinder to the mechanical shock absorber.

- 29. (Currently amended) The vehicle suspension of claim $\underline{26}$ [[24]], further comprising a mechanical link pivotally connected to the actuator arm.
- 30. (Currently amended) The vehicle suspension of claim $\underline{26}$ [[24]], further comprising a hub assembly pivotally connected to the outboard ends of the lower arm and the upper control arm, wherein pivotal connections of the actuator arm, the lower arm, the upper control arm, and the hub assembly generally form a parallelogram.
- 31. (Currently amended) The vehicle suspension of claim $\underline{26}$ [[24]], further comprising:

an actuator pump coupled to $\underline{\text{the}}$ [[an]] actuator [[feed]] line;

wherein:

the actuator comprises a cammed cylinder having has a piston motively coupled to the actuator [[feed]] line;

one of the $\underline{\text{cammed}}$ cylinder and the piston is supported on one of the lower arm and the upper control arm; and

the other of the piston and the $\underline{\text{cammed}}$ cylinder is motively connected to the actuator arm.

32. (Cancelled)

Applicant: Thomas W. Melcher

RESPONSE TO OFFICE ACTION MAILED APRIL 1, 2010

33. (Currently amended) [[The]] \underline{A} frame and suspension for a vehicle, of claim 32, further comprising:

a frame;

a lower arm having an inboard end coupled to the frame and an outboard end;

an upper control arm having an inboard end and an outboard
end, the upper control arm pivotally connected to the lower arm;
an actuator comprising an actuation mechanism and at least
one actuator arm;

the actuator arm pivotally connected to the upper control
arm;

the actuation mechanism connected to the actuator arm; a cammed cylinder having a piston in fluid communication with [[an]] the actuation mechanism that at least partially controls the actuator arm; and

 $\frac{\text{wherein}}{\text{one of the lower arm and}}$ the upper control arm by the actuator arm.

- 34. (Currently amended) The frame and suspension for a vehicle of claim 33, wherein the actuation mechanism comprises a mechanical shock absorber and [[the]] an actuator line that connects the cammed cylinder to the mechanical shock absorber.
- 35. (Currently amended) The frame and suspension for a vehicle of claim 33 [[32]], further comprising a mechanical shock absorber pivotally connected to the actuator arm.

Applicant: Thomas W. Melcher

RESPONSE TO OFFICE ACTION MAILED APRIL 1, 2010

36. (Previously presented) The frame and suspension for a vehicle of claim 35, wherein the mechanical shock absorber is pivotally connected to the frame.

37. (Currently amended) The frame and suspension for a vehicle of claim 35, further comprising:

a cam member supported on the lower arm;

 $\underline{\text{the}}$ [[a]] cammed cylinder having a piston motively coupled to the cam member; and

an actuator line connecting the cammed cylinder to the mechanical shock absorber.

- 38. (Previously presented) The frame and suspension for a vehicle of claim 37, wherein the cammed cylinder is supported on the frame.
- 39. (Currently Amended) The frame and suspension for a vehicle of claim 33 [[32]], further comprising a mechanical link pivotally connected to the actuator arm.
- 40. (Previously presented) The frame and suspension for a vehicle of claim 39, wherein the mechanical link is pivotally connected to the frame.
- 41. (Currently Amended) The frame and suspension for a vehicle of claim 33 [[32]], further comprising a hub assembly pivotally connected to the outboard ends of the lower arm and the upper control arm, wherein pivotal connections of the actuator arm, the lower arm, the upper control arm, and the hub assembly generally form a parallelogram.

Applicant: Thomas W. Melcher

RESPONSE TO OFFICE ACTION MAILED APRIL 1, 2010

42. (Currently Amended) The frame and suspension for a vehicle of claim $\underline{41}$ [[32]], further comprising a mechanical link pivotally connected to each of the actuator arm and the frame, wherein the parallelogram is a first parallelogram and pivotal connections between the mechanical link, the frame, the actuator arm, and the lower arm form a second parallelogram.

43. (Currently Amended) The frame and suspension for a vehicle of claim 33 [[32]], further comprising:

an actuator pump coupled to an actuator feed line; wherein:

the actuator comprises $\underline{\text{the cammed}}$ [[a]] cylinder having $\underline{\text{the}}$ [[a]] piston motively coupled to the actuator feed line;

one of the <u>cammed</u> cylinder and the piston is supported on one of the lower arm and the upper control arm; and

the other of the piston and the $\underline{\mathsf{cammed}}$ cylinder is motively connected to the actuator $\mathtt{arm.}$

44. (Currently amended) The frame and suspension for a vehicle of claim 33 [[32]], wherein:

the frame is a vehicle frame;

the suspension comprises the lower arm, the upper control arm, the actuator arm, and the actuator as a first arm assembly; and

wherein the suspension further comprises at least a second arm assembly comprising a second lower arm, a second upper control arm, a second actuator arm, and a second actuator similar to the first arm assembly.

Applicant: Thomas W. Melcher

RESPONSE TO OFFICE ACTION MAILED APRIL 1, 2010

45. (Previously presented) The frame and suspension for a vehicle of claim 44, wherein each arm assembly includes a cammed cylinder fluidly connected to at least one mechanical shock absorber.

- 46. (Currently amended) The frame and suspension for a vehicle of claim 45, wherein the cammed cylinders have pistons that move therein to provide a greater or lesser effective volume of a fluid for each shock absorber, the effective volume varying with an expansion or contraction of the fluid.
- 47. (Previously presented) The frame and suspension for a vehicle of claim 46, wherein the effective volume is decreased as the respective arm assembly is rotated through an arc toward the frame.
- 48. (Previously presented) The frame and suspension for a vehicle of claim 46, wherein the effective volume is decreased as the respective arm assembly is rotated through an arc away from the frame.